

ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

MAY - 6 1993

In the Matter of

Amendment of the Commission's Rules to Provide Channel Exclusivity to Qualified Private Paging Systems at 929-930 MHz

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

PR Docket No. 93-35
RM-7986

To: The Commission

COMMENTS OF PAGING NETWORK, INC.

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SUMMARY

PageNet believes that the instant proposal to provide earned channel exclusivity to qualified PCP systems is another in a series of Private Radio Bureau initiatives whose beneficial effects on both consumers and the industry will be far-reaching. The Commission, aptly recognizing that exclusivity "should be implemented sooner rather than later" to prevent crowding on 900 MHz PCP channels before it occurs (Notice at ¶ 17), has fine-tuned NABER's proposal and promulgated rules that reflect a careful balancing of interests.

The Commission has structured its proposed rules to provide incentives for carriers to expeditiously build and operate systems while concurrently diminishing the threat of counterproductive "gamesmanship" and speculative abuses. Its proposals, with certain refinements, will benefit both consumers and the paging industry. Adoption of this proposal will encourage technological innovation, spectral efficiency, and development of new and improved services. Through this proposal, the industry, and, in particular, the small carriers that stand to suffer most acutely from congestion, have a vehicle through which to avoid the unwarranted difficulties that have plagued the lower bands, thereby assuring the continued quality of service that 900 band users have come to expect. The proposal makes spectrum available for smaller entities with the resources to develop and

implement systems tailored to their own needs as well as spectrum for larger commercial carriers to establish systems that can provide a nationwide service to meet the various and diverse requirements of a number of entities. Moreover, the proposal justifiably rewards those carriers who have invested significantly in constructing and operating on 900 MHz PCP frequencies, where others have chosen not to do so.

PageNet believes, however, that the public interest demands even more of licensees desiring exclusivity than the Commission's Notice proposes. Particularly where a carrier would earn exclusive rights to a valuable frequency across the nation, PageNet believes that the Commission's rules should ensure that the carrier expeditiously build and operate a system that will afford its customers service that is truly national in scope. In this respect, PageNet urges the Commission to adopt rules which require nationwide licensees to operate transmitters in most RBOC territories, to curtail the three year "slow growth" period to eighteen (18) months, and to require that applicants build what they propose or forfeit exclusivity entirely. Once a system is constructed, nationwide carriers will have extraordinary incentives to load the system, rather than keeping it idle or underutilized, in order to earn a return on their investment. The favorable result is the expeditious provision of nationwide service.

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION.....	2
II. DISCUSSION.....	5
A. THE COMMISSION'S PROPOSAL TO PROVIDE FOR EXCLUSIVE USE OF PCP CHANNELS WILL SERVE THE PUBLIC INTEREST.....	5
1. Channel Exclusivity Will Facilitate the Commission's Desire for Maximum Utilization of Spectrum.....	6
2. The Commission's Rules Should Facilitate the Prompt Construction of Systems and the Expeditious Provision of Service to the Public.....	9
B. PAGENET SUPPORTS THE CONFIGURATION OF THE COMMISSION'S PROPOSED SYSTEMS.....	13
1. Local Systems.....	13
a. Number of transmitters.....	13
b. Contiguous transmitters.....	14
c. Separation standard.....	15
2. Regional Systems.....	17
3. Nationwide Systems.....	18
C. ALLOTMENT OF CHANNELS.....	21
D. PREREQUISITES FOR CHANNEL EXCLUSIVITY.....	21
1. Construction Period.....	21
2. Technical Standards.....	21
3. Multiple Channels.....	22

E.	APPLICATION OF PROPOSED RULES TO EXISTING 900 MHZ PAGING SYSTEMS.....	22
F.	FREQUENCY COORDINATION.....	23
IV.	CONCLUSION.....	24

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refinements, will promote the continued rational growth and expansion of 900 MHz PCP systems.

I. INTRODUCTION

PageNet is the largest and fastest growing paging company in the United States, providing paging services to over 2 million subscribers on both PCP and radio common carrier ("RCC") systems in twenty-eight (28) states and the District of Columbia. Much of PageNet's recent growth has been on the PCP side, attributable in large part to the far-sighted licensing policies of the Commission's Private Radio Bureau. PageNet believes that the instant proposal to provide earned channel exclusivity to qualified PCP systems is another in a series of PRB initiatives whose beneficial effects on both consumers and the industry will be far-reaching.

Presently, there are frequencies in the 150, 460 and 900 MHz bands allocated for PCP services. In allocating these channels, the Commission provided that they be used on a shared basis. As the record in this proceeding amply demonstrates, congestion on the frequencies below 470 MHz has resulted in service degradation, including unacceptable interference and transmission delays, for end-users. While spectrum crowding is not yet a significant problem on the more recently allocated 900 MHz channels, PCP growth trends indicate that similar congestion could occur over the next

few years unless the shared licensing rules are substantially modified for this band.

On April 24, 1992, NABER filed a Petition for Rulemaking proposing channel exclusivity for 900 MHz PCP systems that, among other things, contain a defined number of transmitters in a given area. PageNet, along with other private carriers, both large and small, participated in the discussions reflected in NABER's Petition, and, in Comments filed in response to the Petition, urged the Commission to initiate the instant rulemaking proceeding. The Commission, aptly recognizing that exclusivity "should be implemented sooner rather than later" to prevent crowding on 900 MHz PCP channels before it occurs (Notice at ¶ 17), has fine-tuned NABER's proposal and promulgated rules that reflect a careful balancing of interests.

The Commission has structured its proposed rules to provide incentives for carriers to expeditiously build and operate systems while concurrently diminishing the threat of counterproductive "gamesmanship" and speculative abuses. Its proposals, with certain refinements, will benefit both consumers and the paging industry. Adoption of this proposal will encourage technological innovation, spectral efficiency, and development of new and improved services. Through this proposal, the industry, and, in particular, the small carriers that stand to suffer most acutely from congestion, have a vehicle through which to avoid the unwarranted difficulties that have plagued the lower bands, thereby

assuring the continued quality of service that 900 band users have come to expect. The proposal makes spectrum available for smaller entities with the resources to develop and implement systems tailored to their own needs as well as spectrum for larger commercial carriers to establish systems that can provide a nationwide service to meet the various and diverse requirements of a number of entities. Moreover, the

The favorable result is the expeditious provision of nationwide service.

These Comments delineate how the public will be served by the adoption of rules which provide channel exclusivity to qualified PCP systems. In addition, PageNet has set forth individual aspects of the Commission's proposal, and, in turn, offers its comments regarding each. As demonstrated more fully below, by placing the emphasis on prompt construction of a fully operational facility, with the attendant expense that requirement entails, the Commission will facilitate the service goals it seeks to advance.

II. DISCUSSION

A. THE COMMISSION'S PROPOSAL TO PROVIDE FOR EXCLUSIVE USE OF PCP CHANNELS WILL SERVE THE PUBLIC INTEREST

The Commission's proposal will clearly serve the public interest by benefiting both consumers and the paging industry as a whole while maximizing spectral, technical and operational efficiencies. The efficiencies resulting from this new regulatory framework will enable carriers to meet the burgeoning demand for one-way paging services and will provide consumers with higher quality, diverse communications services at a lower cost.

1. Channel Exclusivity Will Facilitate the Commission's Desire for Maximum Utilization of Spectrum

As the Commission recognizes (Notice at ¶ 15), the paging market has evolved rapidly. Since 1985, paging operations have grown exponentially, both in terms of the number of systems and in terms of customer base. As a result of this growth, the demand for spectrum is and will continue to be greater than the supply in many areas of the country. Rapid growth and limited spectrum have spawned frequency saturation in most urban areas and an acute need for providers to operate with spectral efficiency.

As paging channels are occupied by an increasing number of competing service providers, the sharing of frequencies, while technically feasible, threatens to discourage optimally efficient use. Frequency sharing forces carriers to invest in expensive monitoring or interconnection equipment. Message transmission is often delayed because air time must be allotted among multiple users. As PageNet detailed in its Comments filed in response to NABER's Petition, frequency sharing has inhibited the development of wide-area paging systems that rely on high-speed technologies because carriers have significant disincentives to invest in state-of-the-art equipment. In a nutshell, frequency sharing inhibits investment in spectrally efficient technologies because licensees run a significant risk of not being the beneficiaries of their substantial investments.

Further, while more and more paging companies are using high-speed signalling technologies, it is recognized that even this improvement will not provide sufficient capacity to meet anticipated demand. In the absence of requirements to use the most efficient technologies, as some carriers adopt new technologies and others choose not to, the compatibility necessary for frequency sharing will be eliminated or reduced. Indeed, carriers whose technology will accommodate 200,000 subscribers will have difficulty sharing with those who can accommodate only 25,000.

Channel exclusivity, on the other hand, will create a more stable, predictable environment for licensees, affording corresponding benefits to both these licensees and their customers. Exclusivity permits carriers to benefit from the introduction of spectrally efficient technologies and, thus, provides incentives to operate in the most efficient mode available. As the Commission itself has recognized, licensees are more concerned about spectrum efficiency when they have exclusive channel rights in a given area -- exclusive licensees will seek to maximize the value of their spectrum, much as they would seek to maximize the value of an asset such as land. By providing a PCP licensee with the opportunity to earn exclusivity, the Commission guarantees that licensee that it will be able to use one hundred percent of the air time on its channel and, thus, to fully load its system. Inarguably, it is more efficient

where a carrier can spread the costs of a paging system over 250,000 subscribers as opposed to 100.

A more stable environment will be of particular benefit to smaller carriers. At least in the short run, carriers typically do not ask for coordination on frequencies already utilized by large carriers; the potential for high loading on these frequencies generally makes them unattractive in the absence of gamesmanship. This hesitancy to apply for frequencies utilized by larger carriers implicitly gives these carriers more protection from sharing. Smaller carriers in local markets, however, may not similarly benefit because the assumption is that those carriers do not have the same loading potential and, thus, that there is more potential room on the frequency. The Commission's proposal removes this inequity, as it affords all carriers the right to earn exclusivity on their respective channels. Moreover, given the increased predictability and stability exclusivity provides, banks will be more willing to lend money to smaller carriers which may face greater obstacles in obtaining financing.

Where PCP operators have both the flexibility and the incentive to install highly efficient technologies without the risk of having their efforts nullified by a frequency sharing requirement, the end-user benefits. Operators can establish business plans with less risk and offer consumers choices that include local, regional, and nationwide coverage and lower per-subscriber costs. The

ultimate result of exclusive frequency use for qualified applicants will be higher quality communications for end-users, including less wait time for message delivery and interference-free communications. Moreover, by providing for channel exclusivity, the Commission will remove a significant road block toward satisfying future demand for paging services.

2. The Commission's Rules Should Facilitate the Prompt Construction of Systems and the Expeditious Provision of Service to the Public

The Commission has taken initial steps to fine-tune NABER's proposal to deter the threat of speculative abuses and inappropriate gamesmanship, and has increased licensees' incentives to maximize use of the spectrum near-term. The Commission's proposals, with some refinement, will force applicants to come to the table with certainty about their business plans. The bottom line of this proposal is that consumers will get better service more quickly.

Specifically, the Commission proposes to allow PCP applicants eight (8) months to construct their systems or to terminate channel exclusivity. In addition, the Commission proposes to apply its "finder's preference" rules to PCP licensees who obtain exclusive frequency assignments and then fail to construct or operate their systems as proposed. Finally, for construction of systems with more than thirty (30) transmitters, the Commission proposes a "slow growth" option which grants applicants up to three (3) years to

construct based on a showing of reasonable need for the extension, a detailed construction timetable, and evidence of financial ability to construct the system. A slow growth applicant's failure to complete construction as proposed would result in forfeiture of exclusivity and revocation of licenses for all unconstructed transmitters.

PageNet supports an eight (8) month construction period for conventional applicants and the application of the Commission's "finder's preference" rules to help expedite the recovery and reassignment of unused channels. As pertains to slow growth, however, PageNet cautions the Commission that its more liberal construction criteria will allow carriers to proceed at a snail's pace, thus removing valuable frequencies from the pool without providing service to the public as expeditiously as possible. PageNet submits that systems with over 30 transmitters do not need three years to complete construction. In PageNet's experience, there is no reason why a carrier cannot order equipment and have its system up and running within eighteen (18) months. PageNet submits, therefore, that the Commission should narrow its slow growth period to 18 months.²

Moreover, PageNet submits that by allowing those applicants who qualify for slow growth to construct fewer sites than proposed in their applications and then granting

² The Commission's rules could provide for an extension of this 18 month period given a showing of unforeseen circumstances.

them exclusivity based on what they have actually built, the Commission may be inadvertently undermining its policy of ensuring that carriers provide service to the public as quickly as possible. Under the rules as proposed, carriers have every incentive to "go for broke" in their applications, applying for a national exclusivity. These carriers have nothing to lose by failing to live up to their commitment -- they are rewarded with exclusivity for what they actually do construct. However, end-users do lose under this proposal; those sites which remain unconstructed represent available spectrum which has been removed from the market for three long years -- spectrum which might otherwise have been quickly and efficiently utilized to satisfy consumer needs. PageNet recommends, therefore, that while the Commission recognize that the construction of larger systems may necessitate a "slow growth" option, the Commission revise its proposed rules to require that these applicants actually construct what they propose, or forfeit exclusivity.

PageNet believes that these reasonable construction requirements, which more realistically reflect the normal growth of paging systems, coupled with geographic service requirements, will also curtail the ability of licensees to engage in the inappropriate "gamesmanship" which undermines the provision of service to the public. For example, without a geographic service requirement, a licensee jockeying for nationwide exclusivity could construct 300 transmitters in the northeast and claim exclusivity nationwide. Its stake in

this frequency would then preclude carriers who legitimately want to serve the southwest, for example, from using these channels. As a result, consumers would be denied truly nationwide service, valuable spectrum would lie fallow, and the northeast carrier could choose whether to build out this year, in ten years, or not at all.

A reasonable construction schedule requiring significant investment in equipment coupled with a geographic service requirement would complement market forces to promote efficient use of this band while deterring speculative applications and counterproductive gamesmanship. Licensees who are required to construct promptly will have an incentive to build and capitalize on their investment by loading the system rather than keeping it idle or underutilized. Once a carrier has made the significant investment necessary to construct a real system, it will not permit that system to remain idle for long. Much as it makes no sense to build a hotel and not rent any rooms, it makes no sense for a carrier to build a system and not look for a return on its investment. The Commission's rules should ensure, and the public interest demands, that providing service to subscribers, particularly a truly national service where proposed, be the only means through which carriers can earn this return.

B. PAGENET SUPPORTS THE CONFIGURATION OF THE COMMISSION'S PROPOSED SYSTEMS

1. Local Systems

a. Number of transmitters

PageNet concurs with the Commission's proposal to grant local exclusivity to any PCP system comprised of at least six (6) contiguous transmitters. A six transmitter threshold probably ensures adequate coverage in all but the largest markets. However, in the smallest markets, it is often unnecessary to construct six transmitters in order to adequately serve subscribers. The Commission might want to consider, therefore, whether a lower threshold in non-contiguous, stand alone markets might better serve smaller carriers.³

In New York, Los Angeles and Chicago, and perhaps even the ten largest markets, PageNet agrees that a higher exclusivity threshold should be established to ensure that frequencies are assigned to carriers with the resources and commitment to serve these substantial markets. PageNet believes that the Commission's rules should provide for at least an eighteen (18) transmitter threshold in these markets.

³ PageNet submits that in markets where five or fewer transmitters suffice, frequency sharing may neither be a problem nor an actuality because there are probably not 35 applicants wishing to serve these markets.

b. Contiguous transmitters

The Commission proposes that each transmitter in a qualified system be within twenty-five (25) miles of another in order to count toward exclusivity. PageNet believes that this requirement is compatible with the Commission's height/

toward exclusivity regardless of the fact that it is co-located serves the underlying purpose of the Commission's proposed rules because carriers would still be required to invest in, build and operate individual systems in order to qualify for exclusivity. If the Commission were to prohibit co-located transmitters operating on different frequencies from counting toward exclusivity on each channel, it would impose unnecessary costs on carriers -- costs which would eventually be passed on to consumers. PageNet respectfully requests, therefore, that the Commission clarify that this definition applies only to co-located transmitters using the same frequencies.

c. Separation standard

PageNet urges the Commission to adopt a flexible separation standard. Such a standard would enhance the ability of applicants to design systems that effectively and efficiently serve the public. Specifically, PageNet recommends that the Commission adopt for PCP the same approach PageNet has proposed regarding Part 22 licensees.⁴ This approach reflects the reality of the marketplace in paging services, the structure of that market, and will result in cost saving efficiencies, both to the Commission

⁴ See Comments of Paging Network, Inc. in CC Docket 92-115, filed October 5, 1992. Should the Commission, however, adopt other standards in Part 22, it should require that Part 90 900 MHz facilities be operated in accordance with those standards.






and its licensees. A flexible separation standard facilitates more efficient use of the spectrum, and ensures that low power operation does not result in unreasonable service areas or frequency hoarding.

PageNet proposes that the Commission adopt rules which permit PCP facilities to be licensed initially for up to 3500 watts, provided that protection to co-channel operations is maintained.⁵ As with common carrier frequencies, such a change would be in the public interest because it will afford the benefits of higher power operation without unduly increasing the risks of interference, because the potential for interference is not increased with the operation of fewer transmitters at higher power. Such power levels enhance the carriers' ability to construct facilities that provide service over the widest possible area utilizing the fewest number of transmission facilities, thereby reducing the cost of system construction and ultimately the cost of service to subscribers. Without the countervailing threat of harmful interference, the public interest is best

⁵ As there is no potential for co-channel interference on exclusive nationwide frequencies, the Commission should adopt a 3500 watt limit consistent with that established for nationwide service on exclusive common carrier channels. Further, the Commission has issued a Notice of Proposed Rulemaking proposing to amend the height/power rules under Part 22 to allow carriers to operate paging transmitters in the 931 MHz band with an ERP not exceeding 3500 watts, but without the current requirement that such transmitters be surrounded by existing co-channel transmitters of the same licensee. See Notice of Proposed Rulemaking in CC Docket 93-116, released April 23, 1993.

served where carriers can take advantage of economies of scale and pass the substantial savings on to their customers.

PageNet urges the Commission to utilize a formula to calculate allowable power similar to that proposed in its Comments regarding the revisions to Part 22. See Exhibit 1, attached. PageNet believes that the use of such a formula would allow carriers to set power with respect to height in a



there be enough contiguous transmitters to meet the criteria for local exclusivity in that market.⁶ PageNet supports this attempt to strengthen the rules to ensure that no "blocking out" of significant markets occurs through strategic placement of non-contiguous transmitters. Specifically, by requiring that regional applicants qualify for local exclusivity in each of these markets, the Commission will ensure that regional systems provide regional service to all consumers in that market. Under these rules, a regional carrier would not be able to reserve an exclusive channel in a particular market, at the same time precluding local exclusivity in that market, by the strategic placement of one transmitter. Instead, a regional carrier will only be able to earn exclusivity by providing truly regional service.

3. Nationwide Systems

PageNet fully supports the Commission's decision to facilitate the development of nationwide PCP systems. However, the three hundred (300) transmitter threshold which the Commission proposes must be coupled with reasonable criteria which force prompt construction, as well as geographic distribution requirements in order to guard against speculation, warehousing and the inappropriate

⁶ It is PageNet's understanding, then, under the Commission's proposed rules, that in the top 30 markets, regional carriers must have at least 6 transmitters within 25 miles of another (or 18 in the top 3 markets) to qualify for exclusivity.

gamesmanship which may preclude significant coverage of all markets. PageNet firmly believes that the Commission should distinguish between systems that are truly national and those that are regional in nature. Certainly, for example, the rules adopted in this proceeding should not allow a carrier to place 300 transmitters in the northeast, obtain exclusivity on that frequency across the country, and call itself a nationwide system. The public interest demands more in exchange for the exclusive right to use valuable spectrum -- carriers must not only construct transmitters, but also provide the public with the service they propose, whether local, regional, or national in nature.

PageNet offers the following comments in response to the concerns expressed by the Commission concerning nationwide exclusivity. First, the idea that granting nationwide exclusivity will result in a mass conversion to national systems is simply not grounded in reality. The financial burdens associated with such an undertaking, as amply demonstrated in the record in this proceeding, are enormous. Carriers, therefore, will not invest in such systems without concomitant consumer demand. Similarly, any concern that conversion to national systems would preclude the offering of local or regional service is without basis.

Simply put, the development of nationwide systems will be driven by consumer demand, not by the Commission's licensing processes. Paging is an intensely competitive and rapidly growing industry whose market is characterized by

burgeoning demand, rapid reductions in price, and steady improvement in service quality and coverage. The marketplace has forced all carriers to come up with competitive plans and to understand consumer needs in their markets and potential markets. Allowing for nationwide exclusivity will not force carriers to deviate from sound business plans where the market does not so dictate. Instead, this policy will afford carriers the ability to meet consumer demand for this service, as well as regional and local service. Thus, from an end-user's perspective and, accordingly, a public policy perspective, new national systems will not detract from but enhance service offerings as they increase competition.

Finally, as stated above, PageNet commends the Commission for its efforts to distinguish paging systems that provide truly national service from systems that are essentially regional in nature. In this regard, PageNet believes that geographic distribution requirements are essential to ensure adequate coverage in all regions. PageNet supports the Commission's proposal to require nationwide paging systems to provide service in a minimum of two of the seven RBOC regions. However, PageNet would also support a more stringent requirement, e.g., requiring service in four or five of the seven regions. In addition to the requirements already proposed by the Commission, to ensure that residents or transients in smaller markets are entitled to the same nationwide service as those in New York or L.A.,